

Environmental Sciences, Food Industry and Biotechnology at DTU: Highlights

Environmental pollution, depletion of natural resources and dangerous foodstuffs are growing issues in Vietnam, threatening people's health and reducing their quality of life. DTU has been promoting research to develop helpful new products for the community, focusing on comprehensive Environment & Resources, Food Industry and Biotechnology programs. After thoroughly researching the needs of those sectors, long-standing business partnerships have enabled DTU to graduate highly qualified professionals who meet all market requirements.

Environment & Resources studies strengthen the treatment and management of pollution

Many nations, including Vietnam, are moving towards a green economy policy after the Covid-19 pandemic, based on the exploitation of natural resources, to guarantee social security, protect the environment and achieve sustainable economic development. As a result, DTU has constantly invested in infrastructure and experienced lecturers, including PhDs educated in developed countries such as France, Germany, Belgium and South Korea, in order to graduate increasing numbers of skilled environmental engineers.

DTU currently offers the following minors in Environment & Resources:

- Environmental Technology & Engineering
- Resource & Environmental Management
- Travel Resource Management



DTU students conduct environmental research and go on field trips

State-of-the-art chemistry, microbiology and environmental technology laboratories are readily available, with lecturers who provide the ideal real-time environment for Environmental & Chemical Engineering students to experiment and explore solutions to issues related to their majors. Lecturers and students have worked together in projects such as:

- The treatment of domestic waste, textile dyeing wastewater and aquaculture wastewater
- An assessment of the quality of the marine environment after the Formosa incident

Recent research and consulting for the city of Danang on vital issues, such as:

- Slope movement and beach erosion
- Saltwater intrusion into groundwater
- Drought and available water resources

DTU Environmental Technology & Engineering graduates are able to:

- Analyze situations
- Propose ideas
- Offer design solutions
- Develop solid waste and wastewater treatment systems

Resource & Environmental Management students are trained to work in status assessment, policymaking, planning and the sustainable exploitation of natural resources.

Environmental management.

The Travel Resource Management major educates students to:

- Identify and assess the interactions between tourism resources
- Analyze tourism activities and the natural, economic and social environment
- Exploit, conserve and sustainably develop touristic and environmental resources

Food Industry and the developing processed food market

Vietnam feeds a population of 97.2 million and also leads in the exportation of agriculture and aquaculture products worldwide, partly due to the work of Food Industry graduates from DTU and other universities. To meet these needs, DTU has created a high-quality education program allowing students to propose creative ideas and apply them to the food processing and production industry, such as the

processing and preservation of several local agricultural and aquaculture products, such as che and sweet potatoes, which are safe, nutritious and healthy.

To meet these needs, DTU educates enables graduates to:

- Apply technological processes at food production facilities
- Inspect and evaluate food quality and develop new food products
- Design, develop and apply technology to food packaging
- Design and conduct food technology experiments
- Operate and manage food production and processing facilities
- Conduct quality assurance, food hygiene and safety control for the community

Students are given in-depth training on food packaging technology, which is a specialty at DTU. Throughout their studies, students visit food companies to observe, experience and plan their future careers at places such as:

- The PVL brewery in Danang
- The Acecook factory
- The Dong Giang che factory
- Other agriculture and aquaculture factories

On graduation, students can pursue postgraduate studies or work for state agencies, domestic and multinational food companies, in processing, product development, packaging, quality control and assurance, food law and regulation management, and nutrition.



Modern equipment at the DTU Center for Molecular Biology specializing in Biotechnology education

Biotechnology supporting the development of agriculture, forestry, fishery and medicine

Biotechnology is now becoming known as a discipline of the future, using technology to manipulate living organisms, cells, in vitro and in vivo, creating products with properties that exceed expectations. Applications include medicine and food production, preparation and production of industrial chemicals, development of crop varieties and animal breeds, application of genetic technology and medical testing. The Biotechnology field enjoys increasing interest and investment and is considered one of the spearheads in the socioeconomic development of Danang.

DTU students are educated in the basics of Biochemistry, cells and microbiology, followed by an in-depth knowledge of the latest technology involving enzymes and proteins, genetics and microbiology, in addition to skills like sample collection and ways of analyzing and synthesizing data.

Biotechnology studies are quite different from other majors and students are required to conduct a great number of time-consuming experiments. DTU has invested in laboratories with the latest equipment, such as a PCR, a real-time PCR, HPLC, FPLC and gene sequencers (SEM). Students are taught by expert lecturers at the DTU Center for Molecular Biology, from developed countries such as Germany, Belgium, Japan, South Korea and the US, educated in molecular, molecular plant physiology, molecular microbiology, enzymes, protein biochemistry, biomedical nanomaterials, molecular genetics, stem cell genetics, cell molecular biology, molecular pharmacology, and natural compounds chemistry.

DTU Bachelors in Biotechnology graduates can work as technical specialists, quality managers or testing staff at businesses active in biology, agriculture, forestry, or fishery, biotechnology specialists at aquaculture and agriculture product processing companies, medical sample analysts, testing staff at hospitals or health facilities, researchers at educational institutes or research centers, in Vietnam or abroad.

In 2020 season, DTU continues to award preferential scholarships students of Environmental Sciences, Food Industry and Biotechnology

- 700 scholarships, worth from 500 thousand to 2 million VND for high-school transcript applicants, with 22 points or higher;
- 450 DTU scholarships, worth from 1 to 5 million VND for applicants with a total High School Graduation Exam three-subject score from 5 to 10 points higher than the admissions minimum;
- A 15% reduction in first-year tuition fees for 50 applicants in Environmental Technology & Engineering and Resource & Environmental Management.

For further information please contact:

The DTU Enrolment Center at 254 Nguyen Van Linh, Danang

Hotline: 1 900 2252 or 090 529 4390 or 090 529 4391

Website: <http://tuyensinh.duytan.edu.vn>

Email: tuyensinh@duytan.edu.vn

(Media Center)